

IN THE CLAIMS

1. (Currently Amended) A device according to claim 11, wherein said controller drives said actuator to ~~method of rehabilitation comprising:~~
——— ~~providing an actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;~~
a coupler which coupling couples said actuator to a point on a human body;
applying a force vector to said point ~~by said actuator~~, said force including a rotation.
2. (Currently Amended) A ~~method~~ device according to claim 1, wherein said force vector includes at least two rotations directions relative to the force vector.
3. (Currently Amended) A ~~method~~ device according to claim 1, comprising a second actuator driven by said controller to ~~applying~~ a second force to at least a second point on said body, simultaneously with said force.
4. (Currently Amended) A ~~method~~ device according to claim 11, of rehabilitation comprising:
——— ~~providing a first actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;~~
a coupler for coupling said ~~first~~ actuator to a first point on a human body;
~~providing~~ a second actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of the actuator and capable of preventing substantial motion in any point in any direction in said volume;
a coupler for coupling said second actuator to a second point on a human body; and
wherein said controller drives said actuators to ~~applying~~ different forces to said points using said actuators.

5. (Currently Amended) A ~~method~~device according to claim 4, wherein said first actuator applies a rotation.
6. (Currently Amended) A ~~method~~device according to claim 4, wherein said different points are on a same limb.
7. (Currently Amended) A ~~method~~device according to claim 4, wherein said different points are on different limbs.
8. (Currently Amended) A ~~method~~device according to claim 7, ~~comprising wherein said~~
controller is configured to exerciseing the two limbs in concert.
9. (Currently Amended) A ~~method~~device according to claim 7, wherein said controller si
configured for ~~comprising~~ copying motion from one limb to the other limb.
10. (Currently Amended) A ~~method~~device according to claim 11 configured to ~~of reverse~~
~~kinematics, comprising:~~
~~controlling motion of at least one point on an organ using an actuator that includes a~~
~~movement mechanism capable of applying a force that interacts with a motion of a patient's~~
~~limb in a volume of at least 30 cm in diameter, in at least three degrees of freedom of motion of~~
~~the actuator and capable of preventing substantial motion in any point in any direction in said~~
~~volume;~~
controlling a position of at least a second point on the ~~organ~~limb; and
wherein said controller si configured to ~~reconstructing by a computer of a value of a~~
bending of at least one joint of said organ from said motion and said position.
11. (Previously Presented) A rehabilitation device, comprising:
an actuator that includes a movement mechanism capable of applying a force that interacts with a motion of a patient's limb in a volume of at least 30 cm in diameter and capable of preventing substantial motion in any point in any direction in said volume;
a support for a patient; and
a controller adapted to adjust a rehabilitation exercise according to the relative positions of said actuator and at least one of said patient and said support.

12. (Previously Presented) A device according to claim 11, comprising a distance sensor for determining said relative positions.
13. (Previously Presented) A device according to claim 11, comprising an imaging sensor for determining said relative positions.
14. (Previously Presented) A device according to claim 11, wherein said controller relates to the relative placement of said patient and said actuator.
15. (Previously Presented) A device according to claim 11, wherein said controller assumes the relative positions differ only in two dimensions.
16. (Previously Presented) A device according to claim 11, comprising a pointer which indicates a desired patient placement.
17. (Previously Presented) A device according to claim 11, wherein said controller is configured to use said actuator to determine said relative placement.
18. (Previously Presented) A device according to claim 11, wherein said controller is configured to use said actuator to indicate a desired relative placement.
19. (Previously Presented) A device according to claim 11, wherein said controller is configured to adjust said exercise on the fly, during an exercise session and in response to patient movement.
20. (Currently Amended) A rehabilitation device according to claim 11, comprising:
a memory storing therein a correspondence between exercises and payment codes;
wherein a said controller is adapted to control a rehabilitating exercise and generate a report including a code from said memory corresponding to said exercise.
21. (Previously Presented) A rehabilitation device, comprising:
at least one actuator adapted to support motion of a body part;
at least one sensor associated with the actuator and measuring said motion; and

a controller which analyses said measured motion and generates a measure of quality of motion and which modifies a rehabilitation plan responsive to said quality of motion measure.

22. (Previously Presented) A device according to claim 21, wherein the controller modifies a selection of future exercises according to a measured quality of motion.

23. (Previously Presented) A device according to claim 21, wherein the controller modifies a selection of parameters for future exercises according to a measured quality of motion.

24. (Previously Presented) A device according to claim 21, wherein the quality of motion measure used is defined as the degree of matching to a $2/3$ power law.

25. (Currently Amended) A ~~method~~device according to claim 11, wherein said controller is configured to~~of rehabilitation, comprising:~~

causing a person to carry out at least one exercise;
estimating a mental state of said person from a result of said at least one exercise; and
automatically selecting at least one second exercise according to said estimation.

26. (Currently Amended) A ~~method~~device according to claim 25, wherein said controller estimates~~ing a mental step state using a comprises~~comparing of performance between two exercises, one or which is expected to elicit a higher compliance.

27. (Currently Amended) A ~~method~~device according to claim 25, wherein said controller estimates~~ing a mental step using a comprises~~comparing of performance within an exercise, using the maximum ability of the patient as a base line against which variation can be determined.

28. (Currently Amended) A ~~method~~device according to claim 25, wherein said estimating is automatic.

29. (Currently Amended) A ~~method~~device according to claim 11, wherein said controller is configured to~~of rehabilitation, comprising:~~

determining a patient's ability to perform a motor task;
determining a patient's ability to perform a non-motor task; and

automatically selecting an exercise or parameters of an exercise for the patient according to said determinations.

30. (Currently Amended) A ~~method~~device according to claim 29, wherein said controller is configured to select using a selecting~~comprises matching of~~ an instruction or feedback modality to a perceptive ability.

31. (Currently Amended) A ~~method~~device according to claim 29, wherein said controller is configured to selected using a selecting~~comprises matching of~~ an instruction or feedback modality to a cognitive ability.

32. (Currently Amended) A ~~method~~device according to claim 29, wherein said controller is configured to select~~selecting comprises~~ an exercise or series of exercises designed to rehabilitate both of said motor and said non-motor abilities.

33. (Currently Amended) A ~~method~~device according to claim 29, wherein said exercise rehabilitates visual-motor coordination.

34. (Currently Amended) A ~~method~~device according to claim 11, wherein said actuator includes a tip which said actuator moves to a spatial location and wherein said controller is configured to~~of rehabilitation comprising;~~
~~moving a motorized actuator having a tip to a spatial position within a volume having a diameter of at least 30 cm, wherein said actuator is capable of preventing substantial motion in any point in any direction in said volume; and~~

instructing a patient to apply force against said tip, wherein said actuator provides a compliant resistance to said force.

35. (Currently Amended) A ~~method~~device according to claim 34, wherein said controller is configured to~~comprising~~ selecting the resistance according to the spatial location.

36. (New) A device according to claim 11, wherein said controller is configured to adjust a force applied during said exercise, based on one or more patient characteristics.